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The Genus *Tachinus* (Coleoptera, Staphylinidae) from the Himalayas with Descriptions of Three New Species¹⁾

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Abstract A collection of the Himalayan species of the genus *Tachinus* are studied. Three new species *T. (Tachinus) sakaii* from Sikkim, North India, *T. (Tachinus) longulus* and *T. (Tachinus) paramalaisei* from Central Nepal are described and illustrated. The male characters of *T. (Tachinus) malaisei* SCHEERPELTZ and *T. (Tachinoderus) subfulavus* ULLRICH are described for the first time.

Key words: Staphylinidae; *Tachinus*; new species; first record of male; Himalayas.

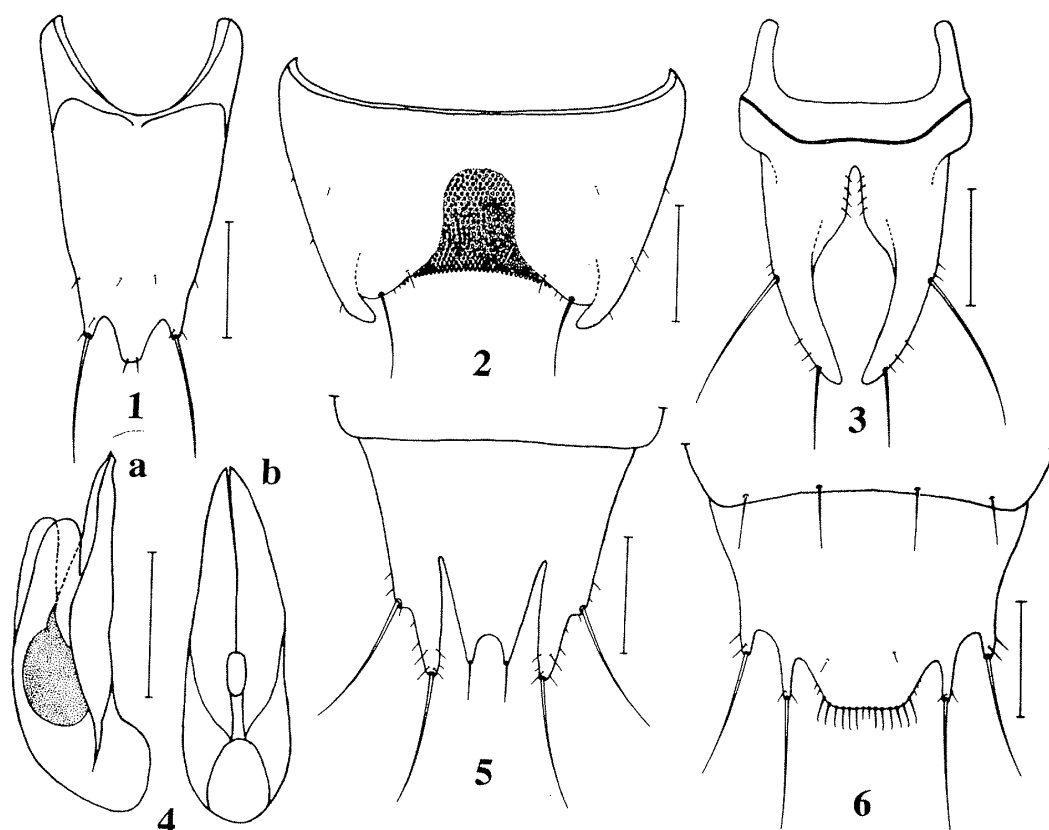
Introduction

Recently, we have had an opportunity to examine a small collection of *Tachinus* collected at the South Himalayas by Dr. M. SAKAI, who had participated scientific surveys on the insect fauna of this region in 1981 and 1983, made by the National Science Museum (Nat. Hist.), Tokyo. After a close examination, it has become apparent that the *Tachinus* collection consists of eleven species, of which three are new to science, viz. *T. (Tachinus) sakaii* sp. nov. from Sikkim, North India, *T. (Tachinus) longulus* sp. nov. and *T. (Tachinus) paramalaisei* sp. nov. from Central Nepal. The males of *T. (Tachinus) malaisei* SCHEERPELTZ and *T. (Tachinoderus) subfulavus* ULLRICH are found for the first time. In the present paper all the collection are enumerated in the following lines.

Type specimens treated here are preserved in the National Science Museum, Natural History, Tokyo (NSMT) and the Entomological Laboratory, College of Agriculture, Ehime University, Matsuyama (EUM).

Before going into details, we wish to express our hearty thanks to Dr. M. SAKAI, Department of Parasitology, Ehime University, for giving us an opportunity to study the invaluable materials and critical reading of the manuscript.

¹⁾ All materials treated in the present paper were obtained by the Zoological Expedition to the Himalayas made by the National Science Museum, Tokyo, under the Grants-in-aid for Overseas Scientific Survey Nos. 56041060, 57043055, 58041074 and 59043068 from the Ministry of Education, Science and Culture, Japan.



Figs. 1–6. *Tachinus malaisei* SCHEERPELTZ. — 1, Male 8th tergite; 2, male 7th sternite; 3, male 8th sternite; 4, male genitalia (a, lateral view; b, ventral view); 5, female 8th tergite; 6, female 8th sternite. (Scale: 0.5 mm).

1. *Tachinus (Tachinus) malaisei* SCHEERPELTZ

(Figs. 1–6)

Tachinus malaisei SCHEERPELTZ, 1965: 311.

Tachinus (Tachinus) malaisei: ULLRICH, 1975: 206.

Male. The male of this species is different from the female in the following characters: Anterior tarsal segments 1–4 dilated. Eighth abdominal tergite (Fig. 1) 3-lobed, with the inner lobe much longer and broader than outer lobes. Seventh sternite (Fig. 2) moderately emarginate at apical margin, impressed at the middle in posterior part where the fine granules are densely arranged. Eighth sternite (Fig. 3) 2-lobed, very deeply incised between the lobes which are long, robust and strongly curved both inward and ventrad. Genitalia (Fig. 4) with lateral lobes moderately long and gradually narrowed apicad.

Specimens examined. 3♂♂, Chitre (1,380 m), Singalila Ridge, West Bengal, India, 7. X. 1983, M. SAKAI leg.; 1♀, Bakkhim (2,670 m) near Yuksam, West Sikkim, India, 12. IX. 1983, M. SAKAI leg.

Distribution. India, N. E. Myanma.

2. *Tachinus (Tachinus) paramalaisei* sp. nov.

(Figs. 7-9)

Female. Body length: 6.6-7.5 mm (from front margin of head to anal end), 4.8-5.0 mm (from front margin of head to apices of elytra); width: 2.6-2.7 mm.

Body large, oval. Color brown to reddish brown and moderately shining; head black to piceous; mouthparts, bases of antennae, sides of pronotum and legs light reddish brown.

Head small, about 0.57 times as wide as pronotum, surface impunctate, provided with dense microsculpture consisting of round meshes. Eye moderately large and convex; ocular seta obsolete. Antenna moderate in length, exceeding to the posterior margin of pronotum; 1st to 4th segments glabrous except for a few long setae; 5th to 11th densely pubescent; the relative length of each segment

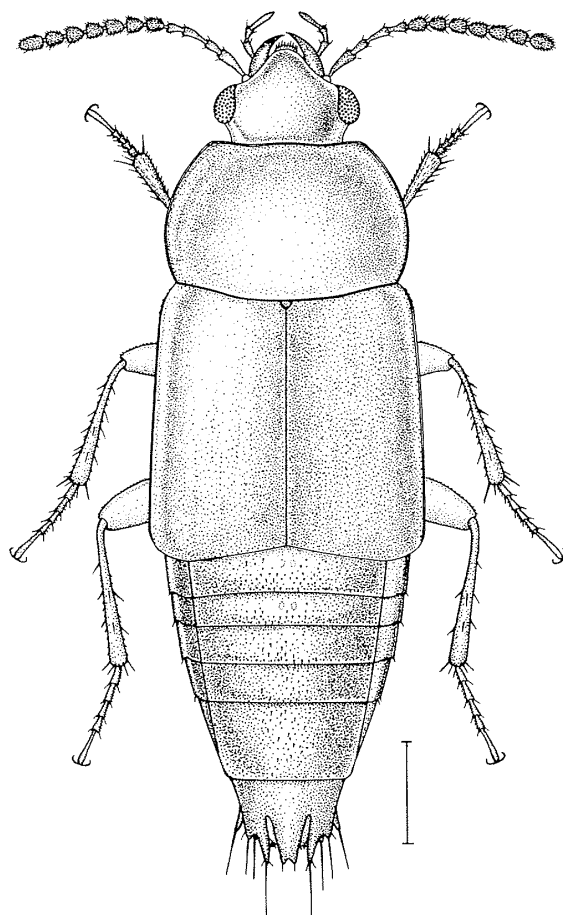
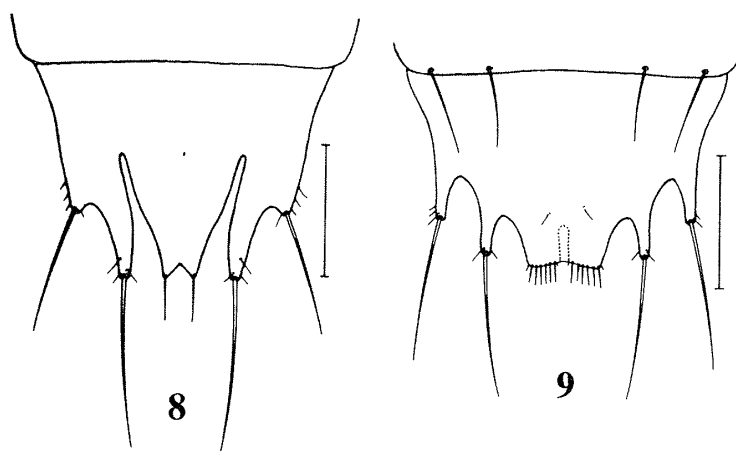


Fig. 7. *Tachinus paramalaisei* sp. nov., female. (Scale: 1 mm).



Figs. 8–9. *Tachinus paramalaisei* sp. nov. — 8, Female 8th tergite; 9, female 8th sternite. (Scale: 0.5 mm).

from base to apex: 27:15:21:11:17:17:16:15:15:15:22; 10th a little narrower than long (length/width=1.15). Maxillary palpus long; the relative lengths of 4th and 3rd segments about 2:1.

Pronotum 0.64 times as long as wide, widest at basal third; anterior margin slightly bisinuate; lateral margins arcuate; posterior margin roundly produced behind; posterior angles blunt; surface almost impunctate with microsculpture similar to that on head.

Elytra in sutural length (excluding scutellum) 1.49 times as long as the median length of pronotum, 0.85 times as long as wide; sides slightly divergent apicad; apices obliquely truncate, rounded at outer corners; surface finely and sparsely punctate, with microsculpture similar to that on pronotum.

Abdomen strongly narrowed from base to apex, sparsely and evenly clothed with fine pubescence; microsculpture dense but fine, consisting of short transverse lines. Third and 4th tergites each provided with a pair of pruinose spots near the middle. Eighth tergite (Fig. 8) 5-lobed; inner lobe robust, as long as intermediate lobes, triangularly and shallowly notched at apex; intermediate lobes somewhat narrow, separated from inner lobe by deep incisions; outer lobes short but definite. Eighth sternite (Fig. 9) 5-lobed; inner lobe broad, narrowly channeled at middle, fimbriate and feebly emarginate at apical margin; outer lobes narrow, similar in shape and size to intermediate lobes.

Legs moderately long; anterior tibiae 0.74 times as long as femora; anterior tarsi not dilated.

Male. Unknown.

Type series. Holotype: ♀ (NSMT), Banthanti (2,620 m) – Melanche (2,000 m) near Ghandrung, Central Nepal, 17. X. 1981, M. SAKAI leg. Paratype: ♀ (EUM), same data as for the holotype.

Distribution. Central Nepal.

Notes. This species is closely allied to *T. malaisei* ULLRICH (Figs. 5, 6), but it can be distinguished from the latter by the following characters: female eighth tergite with inner lobe as long as intermediate lobes, triangularly notched at apex, and with outer lobes distinct; female eighth sternite with inner lobe feebly but distinctly emarginate at apical margin, longitudinally channeled at middle, and with outer lobes similar in size to intermediate lobes.

3. *Tachinus (Tachinus) piceus* CAMERON

Tachinus piceus CAMERON, 1932: 389.

Tachinus (Tachinus) piceus: ULLRICH, 1975: 201.

Specimen examined. 1 ♀, Choka (3,050 m) – Phithang (3,660 m), near Dzongri, West Sikkim, India, 14. IX. 1983, M. SAKAI leg.

Distribution. India.

4. *Tachinus (Tachinus) sakaii* sp. nov.

(Figs. 10–16)

Body length: 4.6–4.8 mm (from front margin of head to anal end), 2.8–2.9 mm (from front margin of head to apices of elytra); width: 1.5–1.6 mm.

Male. Body small, oval and moderately shining. Color piceous to reddish brown; head black; mouthparts, bases of antennae, elytra and apical margins of abdominal tergites light reddish brown; sides of pronotum, apices of elytra and legs yellow to reddish yellow.

Head small, about 0.6 times as wide as pronotum, very finely and sparsely punctate, provided with dense microsculpture consisting of transverse wrinkles and elongate meshes. Eye moderately large and convex; ocular seta obsolete. Antenna long, exceeding the posterior margin of pronotum; 1st to 4th segments glabrous except for a few long setae; 5th to 11th densely pubescent; relative length of each segment from base to apex: 13.0:9.0:11.0:7.5:11.0:10.0:10.0:9.5:9.0:9.0:20.0; the 10th a little wider than long (length/width=0.90). Maxillary palpus fairly long, with relative length of 4th and 3rd segments about 2:1.

Pronotum 0.62 times as long as wide, widest at basal third; anterior margin slightly bisinuate; lateral margin arcuate; posterior margin distinctly and roundly produced behind; posterior angles blunt; punctures and microsculpture similar to those on head. Scutellum parabolic, finely microsculptured.

Elytra in sutural length (excluding scutellum) 1.58 times as long as the median length of pronotum, 0.88 times as long as wide, widest near apical fourth; sides slightly divergent apicad; conjoint apical margins distinctly emarginate at the middle, rounded at outer angles; surface densely covered with microsculpture

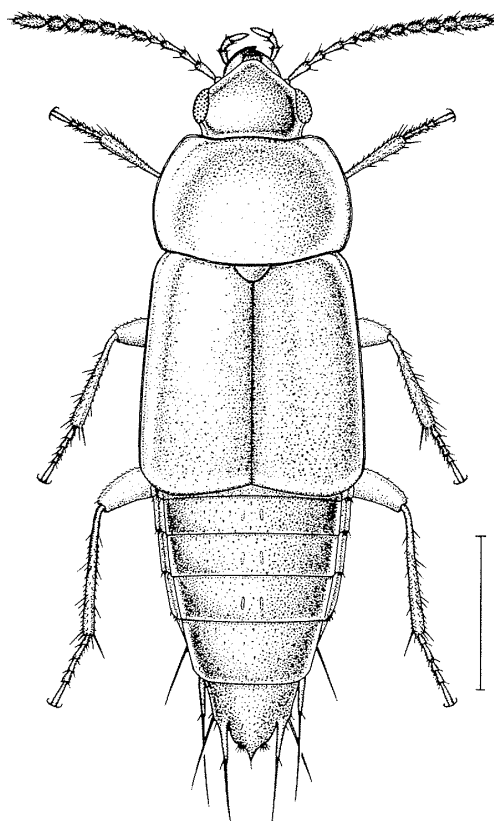


Fig. 10. *Tachinus sakaii* sp. nov., female. (Scale: 1 mm).

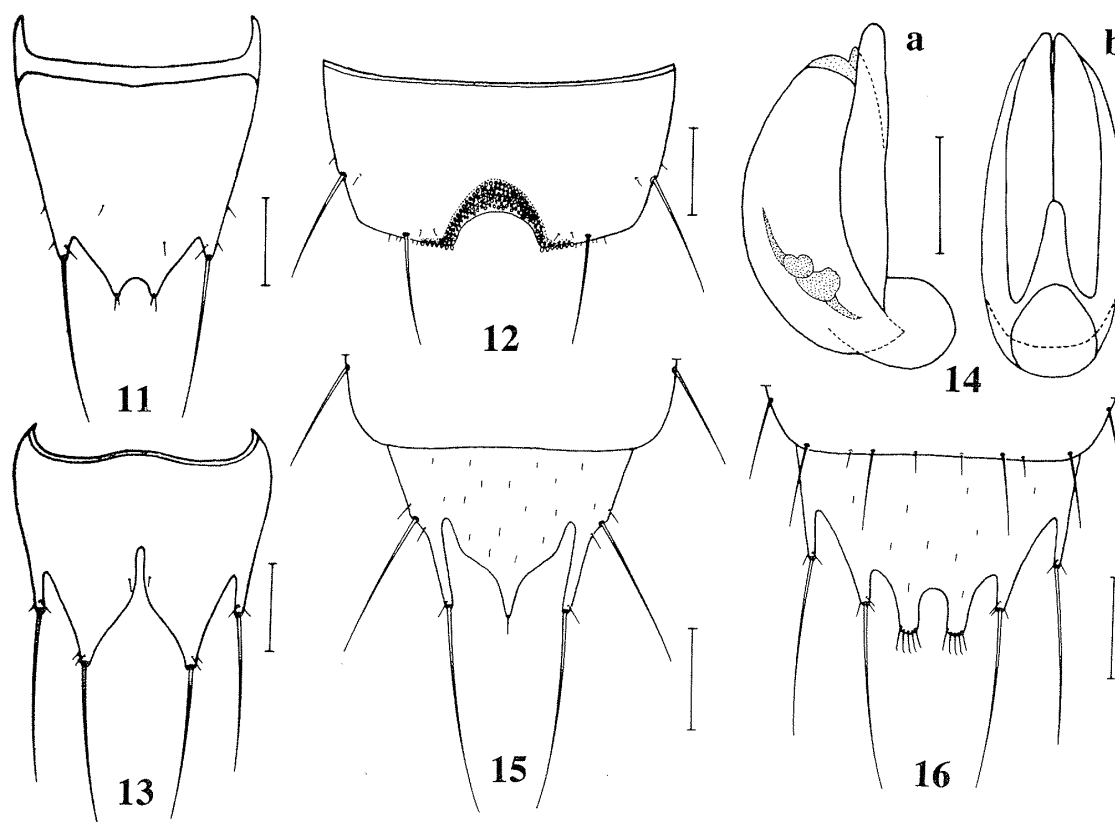
consisting of small and round meshes, with punctures much coarser than those on pronotum.

Abdomen strongly narrowed from base to apex; surface sparsely clothed with fine pubescence, densely covered with microsculpture consisting of elongate and round meshes, very finely and obsoletely punctate; 3rd to 6th tergites each provided with a pair of longitudinally elongate pruinose spots near the middle.

Legs moderately long; anterior tibiae 0.79 times as long as femora; anterior tarsal segments 1–4 dilated.

Eighth tergite (Fig. 11) 4-lobed. Seventh sternite (Fig. 12) semicircularly emarginate at apical margin, and broadly impressed and granulate on the area along the emargination. Eighth sternite (Fig. 13) deeply incised between inner lobes, the depth about 0.56 times as long as the length of sternite; inner lobes broad, abruptly tapered apicad; outer lobes narrow and long. Genitalia (Fig. 14) robust, with lateral lobes short and broad, a little longer than median lobe.

Female. Eighth tergite (Fig. 15) tri-lobed; inner lobe a little exceeding the apices of outer lobes, abruptly narrowed apicad and sharply pointed at apex; outer lobes narrow, faintly curved inward. Eighth sternites (Fig. 16) 6-lobed; inner lobes fimbriate apically, deeply separated each other by a U-shaped emarg-



Figs. 11–16. *Tachinus sakaii* sp. nov. — 11, Male 8th tergite; 12, male 7th sternite; 13, male 8th sternite; 14, male genitalia (a, lateral view; b, ventral view); 15, female 8th tergite; 16, female 8th sternite. (Scale: 0.25 mm).

ination, each about twice as wide as intermediate lobe in apical width; outer lobes a little longer and narrower than intermediate lobes.

Type series. Holotype: ♂ (EUM), Dzongri (3,970 m), West Sikkim, India, 18. IX. 1983, M. SAKAI leg. Paratype: ♀ (NSMT), Phithang (3,660 m), near Dzongri, West Sikkim, India, 14–16. IX. 1983, M. SAKAI leg.

Distribution. North India.

Notes. This species seems to be related to *T. alienus* ULLRICH, 1975 from North India, but can be distinguished from the latter by the following points: body smaller; punctures on pronotum not coarser than those on head; elytra shorter, with apices at most reaching near the apical margin of 3rd abdominal tergite.

5. *Tachinus (Tachinus) pratensis* ULLRICH

Tachinus (Tachinus) pratensis ULLRICH, 1975: 248.

Specimen examined. 1 ♀, Deorali (3,200 m) – Kuldi (2,800 m) near Base-

camp of Mt. Machhapuchhale, Central Nepal, 21. X. 1981, M. SAKAI leg.

Distribution. Nepal.

6. *Tachinus (Tachinus) longulus* sp. nov.

(Figs. 17–19)

Female. Body length: 5.3 mm (from front margin of head to anal end), 2.7 mm (from front margin of head to the apices of elytra); width: 1.3 mm.

Body narrow, elongate, parallel-sided and shining. Color black to piceous; mouthparts, antennae and legs reddish brown.

Head small, 0.62 times as wide as pronotum; surface glabrous, almost smooth, faintly marked with transverse wrinkles. Eye moderate in size and weakly bulging; ocular seta long and robust, located near the inner posterior

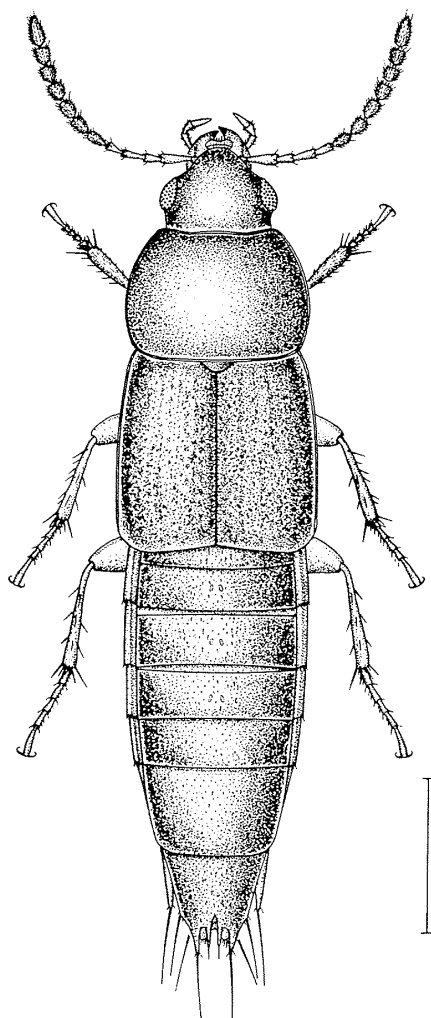


Fig. 17. *Tachinus longulus* sp. nov., female. (Scale: 1 mm).

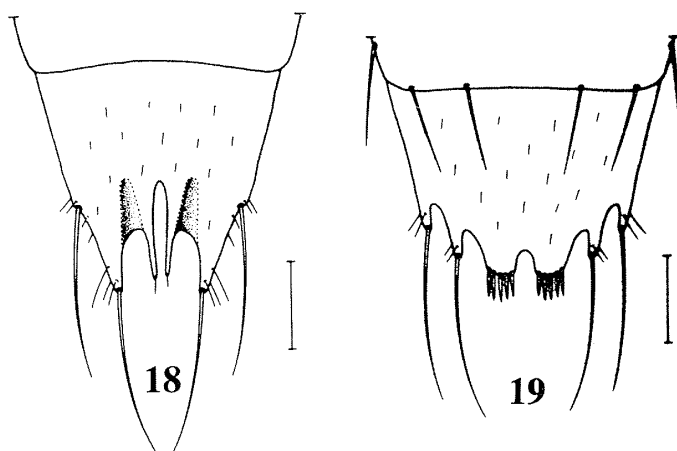
margin of each eye. Antenna moderately long, reaching the posterior margin of pronotum; 1st to 4th segments devoid of pubescence except for a few long setae, 5th to 11th segments densely pubescent; relative length of each segment from base to apex: 12.0:10.0:12.0:9.0:11.0:10.0:10.0:10.0:10.5:11.0:18.0; 10th segment 1.22 times as long as wide. Maxillary palpus long, with the relative lengths of 4th and 3rd segments: 8:5.

Pronotum 0.68 times as long as wide, widest at basal third; anterior margin slightly bisinuate; lateral margin arcuate; posterior margin almost straight; posterior angles rounded; surface glabrous, impunctate; with microsculpture similar to those on head. Scutellum parabolic, finely microsculptured.

Elytra in sutural length (excluding scutellum) 1.34 times as long as the median length of pronotum, 0.83 times as long as wide; sides subparallel; apices obliquely truncate, with outer angles broadly rounded; surface finely and sparsely punctate, densely covered with microsculpture consisting of transverse lines and elongate meshes.

Abdomen elongate, parallel-sided in basal three segments, then gently narrowed apicad; surface finely and sparsely punctate and pubescent; microsculpture arranged in similar manner to those on elytra. Third to 5th tergites each with a pair of distinct pruinose spots near the middle. Eighth tergite (Fig. 18) 4-lobed; inner lobes narrowly separated from each other by a deep incision, distinctly shorter and much narrower than outer lobes; outer lobes long and robust, widely separated from inner lobes. Eighth sternites (Fig. 19) 6-lobed; inner lobes separated each other by a U-shaped shallow emargination, armed with five robust spinous setae at apex, and about 4 times as wide as intermediate lobe in apical width; outer lobes similar to intermediate lobes in form and length.

Legs moderately long, with anterior tibiae about 0.8 times as long as femora; anterior tarsi not dilated.



Figs. 18–19. *Tachinus longulus* sp. nov. — 18, female 8th tergite; 19, female 8th sternite. (Scale: 0.25 mm).

Male. Unknown.

Holotype: ♀ (EUM), Banthanti (2,620 m) – Melanche (2,000 m), near Ghandrung, Central Nepal, 17. X. 1981, M. SAKAI leg.

Distribution. Nepal.

Notes. This species belongs to the *T. elongatus* group and seems to be related to *T. janetscheki* SCHEERPELTZ, 1976 from Nepal, but differs from the latter by the smaller body, and the glabrous head and pronotum. It is also similar to *T. paralleliventris* SCHEERPELTZ, 1965 from Nepal, but can be distinguished from the latter by the following features: inner lobes of female 8th abdominal tergite shorter than outer lobes, and head and pronotum impunctate.

7. *Tachius (Tachinus) oblongus* ULLRICH

Tachinus (Tachinus) oblongus ULLRICH, 1975: 262.

Specimen examined. 1 ♀, Dzongri (3,970 m), West Sikkim, India, 18. IX. 1983, M. SAKAI leg.

Distribution. India.

8. *Tachinus (Tachinoderus) oblongopunctatus* ULLRICH

Paratachinus laticollis CAMERON, 1932: 397.

Tachinus (Tachinoderus) oblongopunctatus ULLRICH, 1975: 313.

Specimen examined. 1 ♀, Landrung (1,600 m) – Damphus (1,350 m) near Pokhara, Central Nepal, 23. X. 1981, M. SAKAI leg.

Distribution. India, Nepal.

9. *Tachinus (Tachinoderus) moticola* CAMERON

Tachinus moticola CAMERON, 1926: 186; 1932: 393.

Tachinus (Tachinoderus) moticola: ULLRICH, 1975: 311.

Specimen examined. 1 ♂, Mt. Siwapuri (2,540 m) near Kathmandu, Central Nepal, 7. X. 1981, M. SAKAI leg.

Distribution. India, Nepal.

10. *Tachinus (Tachinoderus) nepalensis* ULLRICH

Tachinus (Tachinoderus) nepalensis ULLRICH, 1975: 300.

Specimen examined. 1 ♀, Mt. Siwapuri (2,540 m) near Kathmandu, Central Nepal, 7. X. 1981, M. SAKAI leg.

Distribution. Nepal.

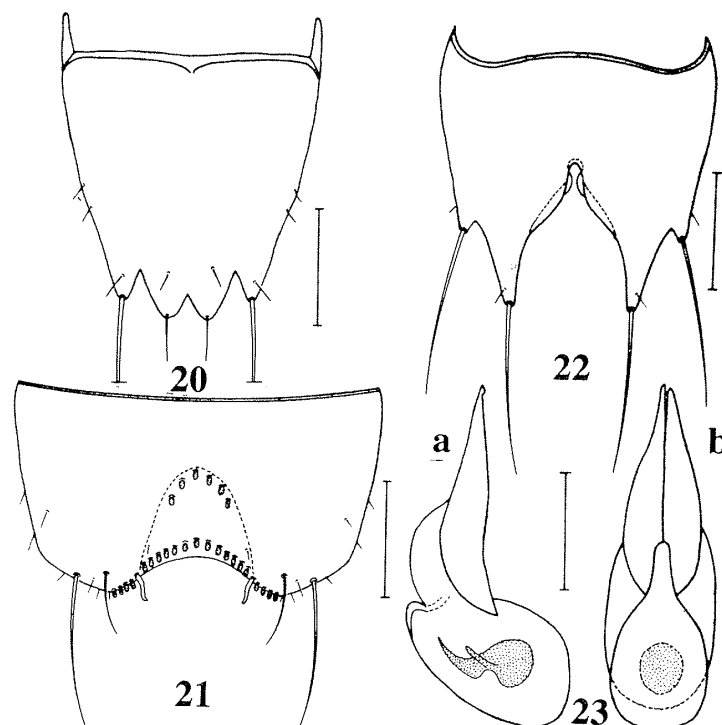
11. *Tachinus (Tachinoderus) subfulavus* ULLRICH

(Figs. 20–23)

Tachinus (Tachinoderus) subfulavus ULLRICH, 1975: 310.

Male. Similar to female in general appearance, but separable from the female by the following sexual dimorphisms: Eighth abdominal tergite (Fig. 20) 4-lobed. Seventh sternite (Fig. 21) shallowly emarginate apically, concaved before the emargination, and provided with 2 rows of granules disposed along apical margin and the base of the concavity. Eighth sternite (Fig. 22) 4-lobed, deeply and widely incised between inner lobes, with the depth 0.58 times as long as the length of sternite; inner lobes robust, gradually narrowed apicad; outer lobes small. Genitalia (Fig. 23) with lateral lobes unsymmetrical, gradually tapering towards apices.

Specimens examined. 1♂, Chitre (1,380 m), Singalila Ridge, West Bengal, India, 7. X. 1983, M. SAKAI leg.; 1♀, Kalapokri (3,020 m), Singalila Ridge, West Bengal, India, 2. X. 1983, M. SAKAI leg.; 1♂, Choka (3,050 m) – Phithang (3,660 m) near Dxongri, West Sikkim, India, 14. IX. 1983, M. SAKAI leg.; 1♀, Choka (3,050 m), near Yuksam, West Sikkim, India, 24. IX. 1983, M. TOMO-



Figs. 20–23. *Tachinus subfulavus* ULLRICH. — 20, Male 8th tergite; 21, male 7th sternite; 22, male 8th sternite; 23, male genitalia (a, lateral view; b, ventral view). (Scale: 0.25 mm).

KUNI leg.; 1 ♀, Bakkim (2,670 m) – Choka (3,050 m) near Yuksam, West Sikkim, India, 13. IX. 1983, M. SAKAI leg.

Distribution. India.

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